

Leukaemia drug found to treat colorectal cancer too

SCIENTISTS in Singapore have discovered that a drug used to treat leukaemia could also be effective against colorectal cancer, which is the most common cancer in the country.

Colorectal cancer is usually caused by benign tumours, called adenomas, that grow and turn malignant when left untreated.

In tests done on mice, Nanyang Technological University (NTU) scientists found that the drug Imatinib halved the growth of existing adenomas and also cut the formation of new ones by about 50 per cent, compared with mice not given the drug.

The finding is significant as there is currently no drug to prevent the recurrence of tumours in the intestine after the cancerous tumours have been removed through surgery.

Professor Sven Pettersson from NTU's Lee Kong Chian School of Medicine said the research is important as Imatinib could be used to help people who are predisposed to developing colorectal cancer by attacking the adenomas before they turn malignant.

Said Dr Parag Kundu, a senior research fellow in Prof Pettersson's laboratory: "In mice with colon cancer, Imatinib was shown to prolong their lifespan by about 50 per cent. The drug was also effective in increasing the survival rate of mice which had late-stage tumours and rectal bleeding."

The drug had the same effects when used on colon tumour tissues taken from human patients.

Dr Kundu said since Imatinib is already researched for use in leukaemia treatment, the maximum dosage that can be given to people safely is already known. This would shorten the research process of its use against human colorectal cancer.

The scientists' work also suggests that the drug could be given intermittently to treat the cancer effectively, which would substantially reduce side effects, such as heart problems, known to occur when it is given continuously for longer periods.

The research was a collaboration between NTU and Sweden's Karolinska Institutet, one of Europe's largest medical universities. It was supported by various foundations, including the Swedish Cancer Society and the National Cancer Centre Singapore, where Prof Pettersson is a senior principal investigator.

FENG ZENGKUN



Prof Sven Pettersson said the research is important as Imatinib could be used to help people who are predisposed to developing colorectal cancer.